



Function Transformations (Vertex) - Double Transformation (Values) to Transformed Vertex

1 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = -f(x) - 2$$

A $(-a, b - 2)$ B $(a, -(b - 2))$

C $(a, -(b + 2))$

2 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = f(-x + 4)$$

A $(-(a - 4), b)$ B $(-(a + 4), b)$

C $(a - 4, -b)$

3 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = f(0.5x - 5)$$

A $(\frac{a}{0.5}, b + 5)$ B $(\frac{a}{0.5} - 5, b)$

C $(\frac{a}{0.5} + 5, b)$

4 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = f(0.25x) + 2$$

A $(\frac{a}{0.25}, b + 2)$ B $(a, 0.25 \cdot b + 2)$

C $(\frac{a}{0.25}, b - 2)$

5 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = f(x + 4) - 5$$

A $(a + 4, b - 5)$ B $(a - 4, b - 5)$

6 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = -f(x - 5)$$

A $(-(a + 5), b)$ B $(a + 5, -b)$

C $(a, -(b + 5))$

7 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = f(2x - 2)$$

A $(a + 2, 2 \cdot b)$ B $(\frac{a}{2}, b + 2)$

C $(\frac{a}{2} + 2, b)$

8 If the vertex of $f(x)$ is (a,b) , what is the vertex of $g(x)$?

$$g(x) = 2f(x - 4)$$

A $(a, 2 \cdot b + 4)$ B $(a + 4, 2 \cdot b)$

C $(\frac{a}{2} + 4, b)$